IN THE CLAIMS:

1. (Currently Amended) For use with a path vector routing protocol, a system for increasing alternative route convergence speed, comprising:

a router information base (RIB) data receiver of a border gateway router, associated with a network, that receives RIB data including:

an update of an active route to a domain in said network that causes said active route to become a withdrawn route as a result of said active route being lost, and

indications, based on loopback addresses associated with nodes through which said withdrawn route passed, of a reachability of said each of said nodes; and

route disqualification logic of said border gateway router, which is associated with said RIB data receiver and which is configured to disqualify alternative routes to said domain based on said indications prior to an alternative route convergence process, wherein said domain is thereby considered unreachable by said process and therefore not considered by said process.

2. (Original) The system as recited in Claim 1 wherein said route disqualification logic disqualifies all alternative routes to said domain if all of said nodes are indicated as reachable.

3. (Original) The system as recited in Claim 1 wherein said route disqualification logic disqualifies alternative routes to said domain that pass through unreachable ones of said nodes.

4. (Original) The system as recited in Claim 1 wherein said nodes are autonomous systems.

5. (Original) The system as recited in Claim 1 wherein said loopback addresses are

distinguishable from ordinary network addresses.

6. (Original) The system as recited in Claim 5 wherein said loopback addresses are formed in accordance with a Border Gateway Protocol extension.

7. (Original) The system as recited in Claim 5 wherein said loopback addresses are assigned canonically.

8. (Previously Presented) For use with a path vector routing protocol, a method of increasing alternative network route convergence speed, comprising:

receiving RIB data including:

an update of an active route to a domain in said network that causes said active route to become a withdrawn route as a result of said active route being lost, and

indications, based on loopback addresses associated with nodes through which said withdrawn route passed, of a reachability of said each of said nodes; and

disqualifying alternative routes to said domain based on said indications prior to an alternative route convergence process, wherein said domain is thereby considered unreachable by said process and therefore not considered by said process.

9. (Original) The method as recited in Claim 8 wherein said disqualifying comprises disqualifying all alternative routes to said domain if all of said nodes are indicated as reachable.

10. (Original) The method as recited in Claim 8 wherein said disqualifying comprises disqualifying alternative routes to said domain that pass through unreachable ones of said nodes.

11. (Original) The method as recited in Claim 8 wherein said nodes are autonomous systems.

12. (Original) The method as recited in Claim 8 wherein said loopback addresses are distinguishable from ordinary network addresses.

13. (Original) The method as recited in Claim 12 further comprising forming said loopback addresses in accordance with a Border Gateway Protocol extension.

14. (Original) The method as recited in Claim 12 further comprising canonically assigning said loopback addresses.

15. (Previously Presented) A border gateway router, comprising:

at least three network interfaces;

routing table memory that contains a table of active routes;

routing circuitry, coupled to said at least three network interfaces and said routing table memory, that routes packets among said at least three network interfaces according to a path vector routing protocol based on addresses contained in said at least three network interfaces and said table of active routes;

route optimization circuitry, coupled to said routing table memory, that loads said active routes into said routing table memory based on an analysis of router information base (RIB) data;

a RIB data receiver, coupled to said route optimization circuitry, that receives RIB data including:

an update of an active route to a domain in said network that causes said active route

to become a withdrawn route as a result of said active route being lost, and

indications, based on loopback addresses associated with autonomous systems through which said withdrawn route passed, of a reachability of said each of said nodes; and

route disqualification logic, which is associated with said RIB data receiver and configured to disqualify alternative routes to said domain based on said indications prior to an alternative route optimization process, wherein said domain is thereby considered unreachable by said process and therefore not considered by said process.

16. (Original) The border gateway router as recited in Claim 15 wherein said route disqualification logic disqualifies all alternative routes to said domain if all of said autonomous systems are indicated as reachable.

17. (Original) The border gateway router as recited in Claim 15 wherein said route disqualification logic disqualifies alternative routes to said domain that pass through unreachable ones of said autonomous systems.

18. (Original) The border gateway router as recited in Claim 15 wherein said loopback addresses are distinguishable from ordinary network addresses.

19. (Original) The border gateway router as recited in Claim 18 wherein said loopback addresses are formed in accordance with a Border Gateway Protocol extension.

20. (Original) The border gateway router as recited in Claim 18 wherein said loopback addresses are assigned canonically.